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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/993,363

DATE: 12/03/2001  
 TIME: 14:00:29

Input Set : A:\Arcd382.app  
 Output Set: N:\CRF3\11212001\I993363.raw

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3 <110> APPLICANT: ASHTON-RICKARDT, PHILIP G.  
 4 OFFERMAN, JOSEPH T.  
 5 PHILLIPS, TIPHANIE  
 7 <120> TITLE OF INVENTION: INDUCTION OF VIRAL IMMUNITY USING INHIBITORS OF  
 8 GRANZYMES  
 10 <130> FILE REFERENCE: ARCD:382USP1  
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/993,363  
 13 <141> CURRENT FILING DATE: 2001-11-14  
 15 <160> NUMBER OF SEQ ID NOS: 16  
 17 <170> SOFTWARE: PatentIn Ver. 2.1  
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 27 ctctttctaa tgcaagtggg acttttgcca tacgcctttt aaagatactg tgtcaagata 180  
 28 acccttcgca caacgtgttc tgttctcctg tgagcatctc ctctgccctg gccatggttc 240  
 29 tcctaggggc aaagggaaac accgcaaccc agatggccca ggcactgtct ttaaacacag 300  
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 33 gagctgcaga agagtccagg aaacacatca acacctgggt ctcaaaaaag accgaaggta 540  
 34 aaattgaaga gttgttgccg ggtagctcaa ttgatgcaga aaccaggctg gttcttgta 600  
 35 atgccatcta ctccaaggga aagtggaaatg aaccgtttga cgaaacatac acaagggaaa 660  
 36 tgccctttta aataaaccag gaggagcaaa ggccagtgc gatgatgtat caggaggcca 720  
 37 cgtttaagct cgcaccagtg ggcgaggtgc gcgcgcagct gctggagctg ccctacgcca 780  
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 42 tgtcagcggg gagagacctg tgtctgtcca agttcgtgca caagagtttt gtggaggtga 1080  
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 50 tggcaagcaa agttcttcta gaattccaca tgcaattcac tctggcgacc ctgtgctttc 1560  
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 52 gaattc  
 55 <210> SEQ ID NO: 2  
 56 <211> LENGTH: 376  
 57 <212> TYPE: PRT  
 58 <213> ORGANISM: Homo sapiens

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60 &lt;400&gt; SEQUENCE: 2

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61 Met Glu Thr Leu Ser Asn Ala Ser Gly Thr Phe Ala Ile Arg Leu Leu
62   1           5           10           15
64 Lys Ile Leu Cys Gln Asp Asn Pro Ser His Asn Val Phe Cys Ser Pro
65           20           25           30
67 Val Ser Ile Ser Ser Ala Leu Ala Met Val Leu Leu Gly Ala Lys Gly
68           35           40           45
70 Asn Thr Ala Thr Gln Met Ala Gln Ala Leu Ser Leu Asn Thr Glu Glu
71           50           55           60
73 Asp Ile His Arg Ala Phe Gln Ser Leu Leu Thr Glu Val Asn Lys Ala
74   65           70           75           80
76 Gly Thr Gln Tyr Leu Leu Arg Thr Ala Asn Arg Leu Phe Gly Glu Lys
77           85           90           95
79 Thr Cys Gln Phe Leu Ser Thr Phe Lys Glu Ser Cys Leu Gln Phe Tyr
80           100          105          110
82 His Ala Glu Leu Lys Glu Leu Ser Phe Ile Arg Ala Ala Glu Glu Ser
83           115          120          125
85 Arg Lys His Ile Asn Thr Trp Val Ser Lys Lys Thr Glu Gly Lys Ile
86           130          135          140
88 Glu Glu Leu Leu Pro Gly Ser Ser Ile Asp Ala Glu Thr Arg Leu Val
89 145          150          155          160
91 Leu Val Asn Ala Ile Tyr Phe Lys Gly Lys Trp Asn Glu Pro Phe Asp
92           165          170          175
94 Glu Thr Tyr Thr Arg Glu Met Pro Phe Lys Ile Asn Gln Glu Glu Gln
95           180          185          190
97 Arg Pro Val Gln Met Met Tyr Gln Glu Ala Thr Phe Lys Leu Ala His
98           195          200          205
100 Val Gly Glu Val Arg Ala Gln Leu Leu Glu Leu Pro Tyr Ala Arg Lys
101          210          215          220
103 Glu Leu Ser Leu Leu Val Leu Leu Pro Asp Asp Gly Val Glu Leu Ser
104 225          230          235          240
106 Thr Val Glu Lys Ser Leu Thr Phe Glu Lys Leu Thr Ala Trp Thr Lys
107          245          250          255
109 Pro Asp Cys Met Lys Ser Thr Glu Val Glu Val Leu Leu Pro Lys Phe
110          260          265          270
112 Lys Leu Gln Glu Asp Tyr Asp Met Glu Ser Val Leu Arg His Leu Gly
113          275          280          285
115 Ile Val Asp Ala Phe Gln Gln Gly Lys Ala Asp Leu Ser Ala Met Ser
116          290          295          300
118 Ala Glu Arg Asp Leu Cys Leu Ser Lys Phe Val His Lys Ser Phe Val
119 305          310          315          320
121 Glu Val Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala Ser Ser Cys Phe
122          325          330          335
124 Val Val Ala Glu Cys Cys Met Glu Ser Gly Pro Arg Phe Cys Ala Asp
125          340          345          350
127 His Pro Phe Leu Phe Phe Ile Arg His Asn Arg Ala Asn Ser Ile Leu
128          355          360          365
130 Phe Cys Gly Arg Phe Ser Ser Pro
131          370          375

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134 <210> SEQ ID NO: 3
135 <211> LENGTH: 1819
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137 <213> ORGANISM: Mus musculus
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142 aaaatgtatg ttattctcct gcgagcatct cctctgctct agctatgggt ctcttgggtg 180
143 caaagggaca gacggcagtc cagatatctc aggcacttgg tttgaataaa gaggaaggca 240
144 tccatcaggg tttccagttg cttctcagga agctgaacaa gccagacaga aagtactctc 300
145 ttagagtggc caacaggctc tttgcagaca aaacttgtga agtcctccaa acctttaagg 360
146 agtcctctct tcacttctat gactcagaga tggagcagct ctccctttgct gaagaagcag 420
147 aggtgtccag gcaacacata aacacatggg tctccaaaca aactgaagggt aaaattccag 480
148 agttgttgtc aggtggctcc gtcgattcag aaaccaggct ggttctcctc aatgccttat 540
149 attttaaagg aaagtggcat caaccattta acaaagagta cacaatggac atgcccttta 600
150 aaataaaciaa ggatgagaaa aggccagtg cagatgatgt tctgtgaagac acatataacc 660
151 tcgcctatgt gaaggagggt caggcgcaag tgctgggtgat gccatatgaa ggaatggagc 720
152 tgagcttggt ggttctgctc ccagatgagg gtgtggacct cagcaagggt gaaaacaatc 780
153 tcacttttga gaagttaaca gcctggatgg aagcagattt tatgaagagc actgatgttg 840
154 aggttttctc tccaaaattt aaactccaag aggattatga catggagtct ctgtttcagc 900
155 gcttgggagt ggtggatgtc ttccaagagg acaaggctga cttatcagga atgtctccag 960
156 agagaaacct gtgtgtgtcc aagtttgttc accagagtgt agtggagatc aatgaggaag 1020
157 gcacagaggc tgcagcagcc tctgccatca tagaattttg ctgtgcctct tctgtcccaa 1080
158 cattctgtgc tgaccacccc ttctttttct tcatcaggca caacaaagca aacagcatcc 1140
159 tgttctgtgg caggttctca tctccataaa gacacatata ctacacaggg agagttctct 1200
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162 tctccctgtc ttgaatgcat ctatgccctt taccaggtta tgtctaataa tgccaaatac 1380
163 cttctgctat gctattgatt gatagcctag ccagtaattt atagccagtt agaactgact 1440
164 tgactgtgca agaatgctat aatggagcta gagagaaggc acaaacta ggaagggttg 1500
165 ctgtttttgc agaggacaca gggacatttc ccaccactca catggctgct tacaacctct 1560
166 ggaaattcca gtttctgtcc atgacttgat tcccttcttt ggcttctact ggctccagca 1620
167 tctgtcacat acatgtatcg tcattcagtt acacacaaac aagtaaaatt ttaaaaataa 1680
168 ataaaaattt aaagagagag tctaaaattt tagtaatggt tagataatag ctgctattgt 1740
169 gcctttttca ggttttaatg tcattattct tgtgtataaa gtcaataatt tataggaaaa 1800
170 catcagtgcc ccggaattc
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174 <211> LENGTH: 374
175 <212> TYPE: PRT
176 <213> ORGANISM: Mus musculus
178 <400> SEQUENCE: 4
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182 Lys Met Leu Cys Gln Ser Asn Pro Ser Lys Asn Val Cys Tyr Ser Pro
183             20             25             30
185 Ala Ser Ile Ser Ser Ala Leu Ala Met Val Leu Leu Gly Ala Lys Gly
186             35             40             45
188 Gln Thr Ala Val Gln Ile Ser Gln Ala Leu Gly Leu Asn Lys Glu Glu
189             50             55             60

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191 Gly Ile His Gln Gly Phe Gln Leu Leu Leu Arg Lys Leu Asn Lys Pro
192 65 70 75 80
194 Asp Arg Lys Tyr Ser Leu Arg Val Ala Asn Arg Leu Phe Ala Asp Lys
195 85 90 95
197 Thr Cys Glu Val Leu Gln Thr Phe Lys Glu Ser Ser Leu His Phe Tyr
198 100 105 110
200 Asp Ser Glu Met Glu Gln Leu Ser Phe Ala Glu Glu Ala Glu Val Ser
201 115 120 125
203 Arg Gln His Ile Asn Thr Trp Val Ser Lys Gln Thr Glu Gly Lys Ile
204 130 135 140
206 Pro Glu Leu Leu Ser Gly Gly Ser Val Asp Ser Glu Thr Arg Leu Val
207 145 150 155 160
209 Leu Ile Asn Ala Leu Tyr Phe Lys Gly Lys Trp His Gln Pro Phe Asn
210 165 170 175
212 Lys Glu Tyr Thr Met Asp Met Pro Phe Lys Ile Asn Lys Asp Glu Lys
213 180 185 190
215 Arg Pro Val Gln Met Met Cys Arg Glu Asp Thr Tyr Asn Leu Ala Tyr
216 195 200 205
218 Val Lys Glu Val Gln Ala Gln Val Leu Val Met Pro Tyr Glu Gly Met
219 210 215 220
221 Glu Leu Ser Leu Val Val Leu Leu Pro Asp Glu Gly Val Asp Leu Ser
222 225 230 235 240
224 Lys Val Glu Asn Asn Leu Thr Phe Glu Lys Leu Thr Ala Trp Met Glu
225 245 250 255
227 Ala Asp Phe Met Lys Ser Thr Asp Val Glu Val Phe Leu Pro Lys Phe
228 260 265 270
230 Lys Leu Gln Glu Asp Tyr Asp Met Glu Ser Leu Phe Gln Arg Leu Gly
231 275 280 285
233 Val Val Asp Val Phe Gln Glu Asp Lys Ala Asp Leu Ser Gly Met Ser
234 290 295 300
236 Pro Glu Arg Asn Leu Cys Val Ser Lys Phe Val His Gln Ser Val Val
237 305 310 315 320
239 Glu Ile Asn Glu Glu Gly Thr Glu Ala Ala Ala Ser Ala Ile Ile
240 325 330 335
242 Glu Phe Cys Cys Ala Ser Ser Val Pro Thr Phe Cys Ala Asp His Pro
243 340 345 350
245 Phe Leu Phe Phe Ile Arg His Asn Lys Ala Asn Ser Ile Leu Phe Cys
246 355 360 365
248 Gly Arg Phe Ser Ser Pro
249 370
254 <210> SEQ ID NO: 5
255 <211> LENGTH: 9
256 <212> TYPE: PRT
257 <213> ORGANISM: Mus musculus
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261 1 5
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265 <211> LENGTH: 9

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266 <212> TYPE: PRT
267 <213> ORGANISM: Mus musculus
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285 <211> LENGTH: 31
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287 <213> ORGANISM: Mus musculus
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294 <211> LENGTH: 18
295 <212> TYPE: DNA
296 <213> ORGANISM: Mus musculus
298 <400> SEQUENCE: 9
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303 <211> LENGTH: 22
304 <212> TYPE: DNA
305 <213> ORGANISM: Mus musculus
307 <400> SEQUENCE: 10
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311 <210> SEQ ID NO: 11
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314 <213> ORGANISM: Mus musculus
316 <400> SEQUENCE: 11
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321 <211> LENGTH: 34
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323 <213> ORGANISM: Mus musculus
325 <400> SEQUENCE: 12
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330 <211> LENGTH: 24
331 <212> TYPE: DNA
332 <213> ORGANISM: Mus musculus
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338 <210> SEQ ID NO: 14

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VERIFICATION SUMMARY

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L:12 M:270 C: Current Application Number differs, Replaced Current Application Number